



# Static Camera Expansion Programme

## Ngauranga Gorge camera – background



## HOW THIS SITE WAS SELECTED

### » STAGE 1: MATHS AND SCIENCE (JULY-OCTOBER 2013)

- Police commissioned independent experts, Abley Transportation Consultants, to develop a scientific methodology to identify and rank sections of road where the presence of static speed cameras could prevent the most speed-related crashes.
- The methodology had to fit three requirements:
  - Simple and robust
  - Easy for non-experts to understand
  - Could be applied to the entire road network.
- To meet the requirements, Abley developed a methodology based on historical risk – speed-related crashes that had occurred over 10 years (2003-2012).
- Data was sourced from the NZ Transport Agency's Crash Analysis System (CAS), and national road network data supplied by Terralink.
- Only data from speed-related crashes was used in the analysis, because evidence shows speed cameras reduce the risk of this type of crash.
- Every road in New Zealand – including urban streets and highways – was considered during the analysis. A digital map of the road network was split into more than a million 100m segments. Speed-related crashes that had occurred over the 10 year period were attributed to the appropriate segment and counted.
- The 10% of segments with the highest number of speed-related crashes were analysed further to rank them for risk. Three variables were considered:
  - How many high-risk segments joined together on a stretch of road to form a 'corridor of risk'. The longer the corridor, the longer road users are exposed to risk.
  - The average number of crashes per kilometre of the corridor of risk
  - The highest number of crashes on one segment within the corridor of risk (i.e. if there was a particular black spot).
- The three variables were equally weighted to give a final ranking for each corridor of risk. In total, 1250 corridors of risk were identified across the full network.

### » STAGE 2: CONSULTATION (NOVEMBER 2013-JULY 2014)

- A team led by Inspector Mark Stables, Manager of Crash Investigation and Calibration Services, discounted sites that didn't meet the practical criteria for installation of speed cameras.
- More than 600 remaining sites were reviewed by people with in-depth knowledge of each road. This included local representatives from Police, New Zealand Transport Agency, city and district councils, Auckland Transport, Auckland Motorway Alliance, the Automobile Association and others.
- Engineers then visited the agreed sites to conduct physical on-site assessments, including preparation of engineering and site plans, to confirm sites were suitable.

## **» FIRST 12 SITES FOR ROLLOUT OF NEW FIXED SPEED CAMERAS**

<b>Rank</b>	<b>Road Name</b>	<b>Locality (*existing site)</b>	<b>City</b>	<b>Police District</b>	<b>Operational (2014)</b>
1	Wainuiomata Road	Wainuiomata	Lower Hutt	Wellington	September
2	Hutt Road	Korokoro	Lower Hutt	Wellington	October
3	Candia Road	Henderson Valley	Auckland	Waitematā	November
4	Wellington Urban Motorway	Ngauranga*	Wellington	Wellington	July
5	Mill Road	Totara Park	Auckland	Counties Manukau	November
6	Wainui Road	Waiwhetu	Lower Hutt	Wellington	October
7	Whitford Brown Avenue	Aotea	Porirua	Wellington	October
8	State Highway 1	Thorndon*	Wellington	Wellington	October
9	Murphys Road	Totara Park	Auckland	Counties Manukau	November
10	Great North Road	Kelston*	Auckland	Waitematā	November
11	Great South Road	Otahuhu*	Auckland	Counties Manukau	October
12	Tamaki Drive	Parnell	Auckland	Auckland City	November

## **» WHY IS THE NGAURANGA GORGE CAMERA GOING LIVE FIRST?**

- The first of the new generation static cameras was installed in Ngauranga Gorge in June 2014. It has been operating in trial mode until becoming fully operational on 14 July 2014.
- The new camera replaced an existing digital camera that used older technology, which has been operational since September 2013.
- This site was selected from the 12 sites to become operational first because:
  - It is one of the most complex sites across the road network, so provides the most rigorous testing opportunity.
  - Its proximity to the Police Calibrations Unit makes it easily accessible by the technical team for set-up, assurance, and test activities.



Street	Locality (*indicates existing sites)	Police district	GPS Co-ordinates
State Highway 1	Ngauranga*	Wellington	-41.234256, 174.807294



## **» FURTHER INFORMATION**

- Full speed camera media kit (updated July 2014): <http://www.police.govt.nz/about-us/publication/media-kit-first-12-new-static-camera-sites>
- Speed: [www.police.govt.nz/speed](http://www.police.govt.nz/speed)
- Speed cameras: [www.police.govt.nz/speedcameras](http://www.police.govt.nz/speedcameras)
- Road policing driver offence data: <http://www.police.govt.nz/about-us/publication/road-policing-driver-offence-data-january-2009-2014>
- Public attitudes to road safety survey 2013 (Ministry of Transport): <http://www.transport.govt.nz/research/roadsafetysurveys/publicattitudestoroadsafety-survey/2013publicattitudestoroadsafety/>